

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		
08/882.349	06/25/97	FERMANN	ৰ	-A6939		
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WASHINGTON	DC 20037-32	202	ART UNIT	PAPER NUMBER		
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			DATE MAILED	: 05/26/98		

Please find below and/or attached an Office communication concerning this application or proceeding. 12-13

**Commissioner of Patents and Trademarks** 

PTO-90C (Rev. 2/95) "U.S. GPO: 1998-437-638/80022



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### NOTICE OF ALLOWANCE AND ISSUE FEE DUE

PM52/0526

SUGHRUE MION ZINN MACFEAK & SEAS 2100 PENNSYLVANIA AVE N W WASHINGTON DC 20037-3202

APPLICATION NO.	FILING DATE	TOTAL C	LAIMS	EXA	MINER AND GR	OUP ART UNIT	DATE MAILED
08/882,349	06/25/97	049	MOSK	OWITZ.	N	3642	05/26/98
First Named Applicant FERMANN.	•	MAI	RTIN E.			, <del></del>	

THE OF INVENTION NOTE: MODE AMPLIFIERS AND COMPRESSORS BASED ON MULTI-MODE FIBERS

	ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
,	0 -A6939	359-341.0	00 E5	2 UTILIT	Y NO	\$1320.00	08/25/98

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u>

#### **HOW TO RESPOND TO THIS NOTICE:**

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as yes, verify your current SMALL ENTITY status:
  - A. If the status is changed, pay twice the amount of the FEE DUE shown and notify the Patent and Trademark Office of the change in status, or
  - B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "6b" of Part B should be completed.
- III. All communications regarding this application must give application number and batch number.

  Please direct all communication prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## Application No.

Applicant(s) 08/882,349

Fermann et al

Notice of Allowability

Examiner

Nelson Moskowitz

Group Art Unit 3642



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.
☐ This communication is responsive to
★ The allowed claim(s) is/are 1-49
☐ The drawings filed on are acceptable.
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
received in Application No. (Series Code/Serial Number)
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE <b>THREE MONTHS</b> FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).
□ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
🛛 because the originally filed drawings were declared by applicant to be informal.
including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No
including changes required by the proposed drawing correction filed on, which has been approved by the examiner.
☐ including changes required by the attached Examiner's Amendment/Comment.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal lettter addressed to the Official Draftsperson.
☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.
Attachment(s)
□ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152
☐ Interview Summary, PTO-413
☐ Examiner's Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material

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Serial Number: 08/882349

Art Unit: 3642

- 1) The references cited by Applicants (PTO-1449) have been considered and found to be fairly representative of the state of this art. Harter et al, Taverner et al, Griebner et al, Strasser et al, and DiGiovanni et al were found to be the most relevant references as to the herein claimed invention.
- 2) References A, B and R-U are cited (PTO-892) to show Applicants' publication directed to the subject matter of the herein claimed invention, optical amplifiers with multiple mode propagation, and amplification of diffraction limited input.
- Claims 1-49 are allowed as the prior art fails to anticipate or obviate an optical amplifier with a near diffraction limited input, a mode converter, a pump, and a multi-mode amplifier with output in the fundamental mode.